

MONTHLY REPORT OF RIVER/FLOOD CONDITIONS

**TO: NATIONAL WEATHER SERVICE
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY
SILVER SPRING, MD 20910**

REPORT FOR:
October 2009

Date: 11/13/09

Signature: Peter Corrigan

Summary: There was no river or flash flooding in October 2009 in the Blacksburg Hydrologic Service Area (HSA). Mean October precipitation was 2.88” versus the long-term average (1971-2000 normal) for the month of 3.38 inches (74 of the 76 cooperative stations reporting), or 85% of average. Monthly totals at NWS stations ranged from a low of 2.03” at Meadows of Dan (MODV2) in Patrick County, VA to a high of 6.54” at Boone 1SE (BOON7) in Watauga County, NC. Monthly average temperatures were just slightly above normal, but generally within about 1 degree and ranged from a low mean of 52.2°F at Blacksburg (+0.5°) to a high mean of 58.5°F at Danville (+0.3°).

The first two weeks of October saw a mostly dry and benign weather pattern across the region, the only event of any hydrologic note occurring late on the 9th as a line of showers and thunderstorms along an active cold front brought rain to the mountains ranging from less than 0.10" to around 0.50". A complicated and somewhat disorganized pattern was established from the October 14-16 as several short-waves affected the HSA and brought periods of mainly light to moderate rainfall. Amounts ranged from 0.25" to 1.00" or more across much of the area on the 15th and 16th. 72-hour gage totals included Irish Gap IFLOWS (IRIV2) 2.96", East River Mtn. IFLOWS (ERMV2) 2.56", Witt's Orchard IFLOWS (WITV2) 2.48", Springville IFLOWS (SPIV2) 1.80" and Whitetop Mtn. IFLOWS (WTMV2) 1.76".

A dry week of mainly high pressure ensued, with the first widespread frost and freezes occurring from October 18-20. Temperatures fell into the low 20s in the far northwest, mid-20s in the central mountains and low 30s in the piedmont on several mornings. Thick cloud cover on the 18th allowed both Bluefield and Blacksburg to set date records for the lowest maximum recorded on that date, both stations only reaching 40°F. An approaching cold front brought showers and a few thunderstorms to mainly the western HSA during the overnight of October 23-24 with pockets of very heavy rainfall observed over the North Carolina mountains. Laurel Springs RAWs (LRLN7) received 3.84", Boone TVA (BONN7) 3.43", Boone 1 SE COOP (BOON7) 2.94", Watauga R./Foscoe IFLOWS (FOSN7) 2.90" and Transou COOP (LSPN7) 2.65". Despite the heavy rains no flooding was reported as dry conditions before the event allow the soil to absorb much of the rainfall. Across Virginia, West Virginia and the North Carolina piedmont amounts were much lower, ranging from near zero in the east to about 0.25 to 0.75 inches over the mountains.

The last event of the month developed as low pressure over the gulf coast lifted northeast into the Ohio Valley on the 27th. The strong influx of moisture and synoptic-scale lift across the entire HSA brought widespread soaking rains to the area. Final 24-hour rainfall totals are shown in Figure 1 below, with the highest amounts approaching 2 inches over the eastern Piedmont in the lower Dan River basin. Top gage amounts included Huddleston COOP (HUDV2) 1.85", Randolph (RNDV2) 1.82", Danville ASOS (DAN) 1.73", Pence Springs (PENW2) 1.71" and Lynchburg COOP (LYHV2) 1.68".

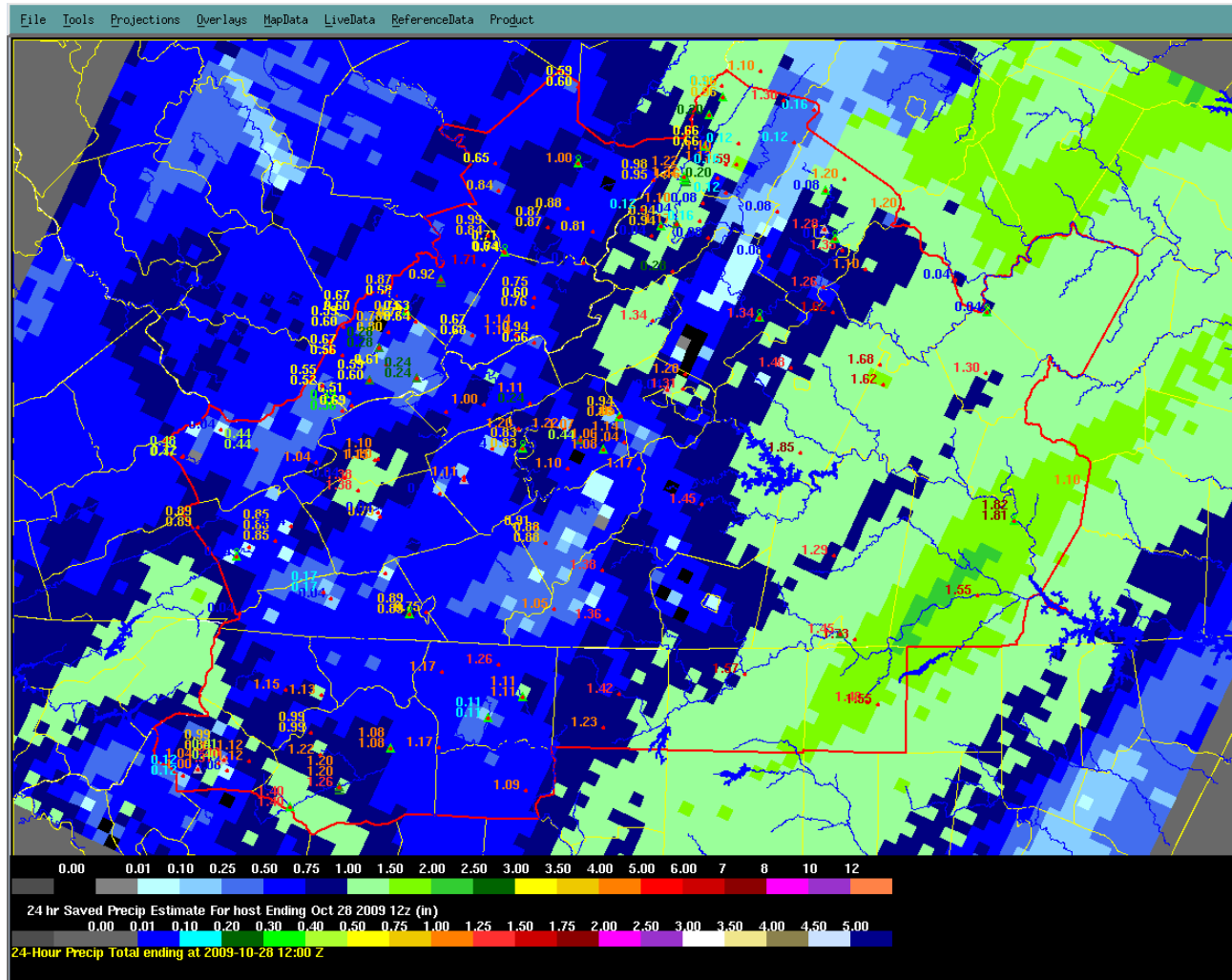


Figure 1: 24-hour MPE rainfall and gages, vt. 12Z, October 28, 2009

Non-Routine Hydrologic Product Summary (Oct.):

Flood/Flash Flood Watches (FFARNK): 0
 Flood Advisories (Urban/Small Stream - FLSRNK): 0
 Flash Flood Warnings (FFWRNK): 0
 Areal Flood Warnings (FLWRNK): 0
 River Flood Warnings (FLWRNK - forecast points): 0

cc:

MIC RNK

NWS HIC

NWS ER

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